

- Scale, and on this basis a comprehensive *National Water Atlas* be prepared.
- 2) A national policy on resource utilization, particularly of riverine resources and other surface-water resources, be formulated and the guidelines be made available to all the concerned agencies—particularly all the local bodies such as Panchayats, Municipalities, Corporations, etc.—to enable them to prepare rational and integrated water utilization programmes based on the principles of judicious management of resources.
 - 3) For the proper implementation of recommendations 1 and 2, advisory bodies on ecologically sound management plans should be established at different administrative levels.
 - 4) A natural resources information data-centre responsible for collection, collation, storage, and retrieval, of data pertaining to natural resources, be provided with adequate instrumentation and personnel for indexing storage retrieval and other related activities for successful and efficient management of the data-centre. An effective and efficient monitoring system may be designed and made available to all the universities and other bodies concerned with the water quality and human health research programmes.
 - 5) Environmental education, formal as well as informal, be made an integral part of the syllabus from early school levels to university ones. To achieve this, the National Council on Education Research and Training, Department of Environment, Government of India, and other interested governmental and non-governmental agencies, should be contacted. These organizations should be assigned the task of preparing textbooks. Small radio talks and television programmes should also be organized. Agencies of mass media such as newspapers and documentary films should be used for educating public opinion.
 - 6) That a *National Institute of Ecology and Environmental Health* be established at Varanasi. The multiple-positive factors in favour of this recommendation are:
 - a) The Banaras Hindu University has done pioneering work in the study of ecological science.
 - b) The River Ganga at Varanasi poses a unique challenge to ecologists in view of the accumulated input of untreated pollutants which is again diluted downstream of Varanasi due to inflow of Ghaghra River with its huge content of relatively unpolluted water.
 - c) It is a famous national as well as international tourist centre and affords an ideal opportunity to study human ecology in relation to resource utilization at national as well as international levels. Not only that: it affords the opportunity for all-the-year-around studies because the climate is moderate practically throughout the year.
 - d) Experts in all disciplines of science and humanities—some of them of international renown—are available in the Banaras Hindu University.
 - e) This city is the heart of an otherwise backward and densely-populated part of the country, i.e. Eastern Uttar Pradesh.
 - 7) Non-governmental organizations working at the national and local level should be consulted before the formulation and finalization of Government Projects relating to river and surface-water resource utilization.
 - 8) Necessary mechanisms should be evolved to establish a regular dialogue between educationalist, ecologist, and other environmentalist, sources and public leaders—particularly the legislators. A series of workshops needs to be organized from time to time—to enlighten all concerned with the problems of water pollution and human health, and to find answers to the problems discussed. In addition to such workshops, small refresher courses should be organized at suitable centres, to train all classes of workers connected with water pollution and environmental health.
 - 9) With respect to the River Ganga, particularly at Varanasi, the conference strongly recommends:
 - a) Creation of two electric crematoria in the southern and northern extremes of the city on the river bank;
 - b) Construction of sewage-treatment tanks and utilization of biogas, irrigation water, manure, etc., as by-products;
 - c) Adequate netting of floating dead bodies including those of animals be done upstream. Economically attractive alternatives be devised for hide and skin-processing, in order to dissuade the throwing of carcasses into the River;
 - d) Suitable planting of vegetation on erosion-prone banks be undertaken; and
 - e) Periodic dredging of the river-bed be done at critical points such as Rajghat having maximum upwelling due to solid-waste depositions.

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GENEVA INTERNATIONAL PEACE RESEARCH INSTITUTE
 (GIPRI) COLLOQUIUM ON 'NUCLEAR ARMS AND INTERNATIONAL LAW', HELD DURING
 1-3 FEBRUARY 1984 IN GENEVA, SWITZERLAND

If the negotiations on nuclear armament that were formerly going on in Geneva between the United States and the USSR continue to be suspended, the problem of nuclear disarmament will, nevertheless, continue to be the object of continuing important discussions in the resumed Disarmament Conference (formerly Committee) at the United Nations in Geneva. Before the resumption of the work of this latter body, GIPRI (Geneva International Peace Research Institute) organized an international colloquium on the theme 'Nuclear Arms and International Law'.

The Colloquium, which was held in the headquarters of the World Health Organization (WHO), brought together some sixty participants from different countries, among whom were specialists of international law and relations as well as of political science, delegates to the Disarmament Conference, and representatives of governmental and non-governmental organizations in Geneva.

The principal themes of the papers presented were: the legality of nuclear arms, the verification of these arms by satellites, power-reactors, confidence-building measures and denuclearized zones, nuclear arms and human rights, developing countries and nuclear arms, non-proliferation, and the ABM Treaty and outer space.

In the course of the discussions which followed the presentation of papers, a number of speakers emphasized the importance of the resumption and development of international negotiations on disarmament. The illegality of the use of nuclear weapons—such use being in contradiction to a number of international agreements—was generally acknowledged, as was the need to refrain from any 'first use' of these arms. Different speakers drew attention to the relationship between disarmament and economic and social development, as well as to the importance of this problem for whole countries—such that the countries of the Third World should be admitted to pertinent negotiation. It was also emphasized that the establishment of efficient controls will build confidence.

By means of this colloquium, GIPRI has made important contributions to the efforts which, in a number of countries, tend to encourage disarmament and suppress nuclear arms, whose extreme danger for humanity must not be underestimated*. The proceedings of the Colloquium will be published by GIPRI with the least possible delay—it is hoped already in the course of the summer of 1984.

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* As has been repeatedly emphasized in the columns of this Journal—see, for example, 'The Environmental Imperative of Nuclear Disarmament', by M. K. Tolba, A. H. Westing & N. Polunin (*Environmental Conservation*, 10(2), pp. 91–5, Summer 1983).—Ed.

COLLOQUY 'ENVIRONMENT AND EMPLOYMENT' OF THE
COUNCIL OF EUROPE PARLIAMENTARY ASSEMBLY, HELD IN
THE PALACIO DE CONGRESOS, BARCELONA, SPAIN,
1–2 MARCH 1984

The main event occupied two very full days under the auspices and in the place indicated above, and was followed the next day by study-visits to the sewage works and waste-incineration plant of the Municipality of Barcelona and the Montseny Nature Park and Nature School of the Diputació de Barcelona. Organized by the Committee on Regional Planning and Local Authorities of the Council of Europe Parliamentary Assembly, whose necessarily ubiquitous Secretary Joern Stegen is to be congratulated on its constructive openness, the Colloquy will have its findings and recommendations passed through the Parliamentary Assembly to the Committee of Ministers of the Council of Europe for hoped-for ratification. Thereafter, so far as they survive, they will go to the Member Governments for action, which it is hoped will widely benefit both the environment and the deteriorating employment situation of many countries.

The proceedings were opened by Pasqual Maragall, Mayor of Barcelona, whose Address of Welcome indicated at once deep insight into the environmental problems besetting his teeming city and gratifying concern for their alleviation. He was followed by the Minister of Public Works and Town Planning of the Government of Spain and then by an address from the President of the Generalitat (Autonomous Government)

of Catalonia, a State of more than six million people. The opening session was terminated by an address of lively exhortation by Karl Ahrens, of the Federal Republic of Germany, President of the Parliamentary Assembly of the Council of Europe.

The main substance of the Colloquy comprised four 'Working Sitzings' of approximately half-a-day each, and consisting of presentations of reports or case-studies followed by due discussion. Chairman of the first Working Sitting was Senator Louis Jung, of France, its chief topics being 'Survey of the Impact on Unemployment of Environment Policies in OECD Countries During the Past Ten Years', 'The Contribution of an Integrated Environment Policy to Economic Development and Employment in the European Community', 'The Environment, Creator of Employment', 'Positive and Negative Impacts of Environment Policy on Employment', and 'The Effects on Employment of Anti-pollution Investments'. Encouraging were such items as the indication that Ciba-Geigy has spent, in recent years, some 15–20 per cent of their annual investment in Switzerland on combating or circumventing environmental problems, and the acceptance of our theme of unemployment and environment constituting a potential 'marriage of convenience'.

Of the Second Working Sitting the Chairman was Peter Hardy, Labour Member of the British Parliament and Chairman of the Sub-committee on the Protection of Natural Environment, Parliamentary Assembly of the Council of Europe. It consisted of accounts of 'The Problems Seen from the Point of View of the Unions' and ditto '... of Business', to which we attempted to add something of a biospherical dimension on the basis that there would be no such 'luxuries' if The Biosphere were not safeguarded at least in reasonable degree. These accounts were followed by case-studies on 'Protection of Forests', 'The Struggle Against Desertification', and 'Protection of Shores'.

Chairman of the Third Working Sitting was Anton Muheim, Thrice President of the Canton of Luzern, Switzerland, and member of the Parliamentary Assembly of the Council of Europe. It consisted of further case-studies—of 'Recycling of Waste' and 'Recourse to New Forms of Energy and Non-polluting Technologies'—and consideration of 'The Approach of Youth Organizations'. These last should constitute a valuable 'renewable resource' on their own, especially for local clean-up activities, although larger and wider operations should be the concern of Governments. The current widespread useful concern for the environment should be cherished and developed, especially through environmental education*.

The Fourth and last Working Sitting was presided over by Josep Verde, of Spain, Vice-President of the Parliamentary Assembly of the Council of Europe, and consisted of reports on 'The Role of Local and Regional Authorities', 'Surveillance and Control of the Metropolitan Environment: the Effects on Employment', and 'An Experiment in Community Employment to Improve Urban Environment'.

The closing session consisted of rather laudatory 'Conclusions of the Colloquy', by Pieter Stoffelen (Labour Member of The Netherlands Parliament and General Rapporteur of the Parliamentary Assembly of the Council of Europe), followed

* This last point was admittedly our own, coupled with mention of the newly organized International Society for Environmental Education—see the account by Professor Craig B. Davis, Secretary-General of WCB-ISEE, published on pp. 353–4 of our Winter issue of last year.—Ed.